AMENDMENTS

Please amend the following paragraphs in the specification:

Page 10, paragraph 33:

B1

As shown in Fig. 1, thioredoxin has a structurally rigid active site formed by the sequence SEQ ID NO 6 –Cys32Gly33Pro34Cys35–. This sequence also forms a tight disulfide loop from the flanking cysteine residues and can accommodate a wide variety of short peptide insertions. The result is that the inserted peptide is presented in a constrained and exposed fashion that maximizes the binding to its target molecule.

Pages 14-15, paragraph 42:

B2

Evidence for specific binding of oligopeptides to TDEC was accomplished as follows. The most frequently repetitive sequences obtained from the 100 clones were used for synthesis of oligopeptides (Sigma Genesis). By conjugating fluorescein isothiocynate (FITC) to the carboxyl termini of peptides, these molecules were tested for in vitro binding with TDECs and NIH3T3 cells (negative control cell line). These peptides contained flanking cysteines so that a disulfide loop may be reformed, thus constraining and mimicking the binding condition of the initial selection process. Positive and negative control peptides were SEQ ID NO 7 PepRGD (H_2N-Cys-Glu-Leu-**Arg-Gly-Asp**-Gly-Trp-Cys-CO_2H) and SEQ ID NO 8 $PepG_7$ (H_2N-Cys-Gly_7-Cys-CO_2H), respectively. The control peptide SEQ ID NO 8 $PepG_7$ is not expected to have any specific binding to membrane proteins, while SEQ ID NO 7 PepRGD has been reported to bind angiogenic endothelial cells, and therefore, should bind both MAGICs and TDECs. In some experiments, poly-L-lysine was also used as a positive control peptide. Monolayers of NIH3T3 and TDECs on glass slide wells were incubated with peptides at 5 μg/ml (1 μg of peptide per 200 μl well) overnight at 37°C in phosphate buffered saline (PBS) with 10%FCS. After washing the cells with PBS with 10%FCS for 3 times at 37°C/15 minutes, fluorescent microscopy of the cells was performed.

Pages 15-16, paragraph 45:

Combining the data from Fig. 4 and Table 2, five peptide sequences were identified to be tested for binding specificity to TDEC. These five peptide sequences are shown in Table 3 with the targeting residues illustrated by three-letter designations. The test peptides are labeled SEQ ID NO 1-5. The control peptide ~~PepG7~~ SEQ ID NO 8 Pep G_7 consists of seven glycine residues flanked by cysteines. This peptide should have no binding specificity to TDEC and serves as the negative control peptide. SEQ ID NO 7 PepRGD has reported specificity for tumor endothelium and serves as the positive control peptide.

Page 16, Table 3:

Seq ID No 1 ~~C-G-G~~ Cys-Gly-Gly-Arg-His-Ser- ~~G-G-C~~ Gly-Gly-Cys

Seq ID No 2 ~~C-G-G~~ Cys-Gly-Gly-Arg-Lys-Leu- ~~G-G-C~~ Gly-Gly-Cys

Seq ID No 3 ~~C-G-G~~ Cys-Gly-Gly-Arg-Arg-Leu- ~~G-G-C~~ Gly-Gly-Cys

Seq ID No 4 ~~C-G-G~~ Cys-Gly-Gly-Arg-Arg-Ser-Arg- ~~G-G-C~~ Gly-Gly-Cys

Seq ID No 5 ~~C-L-L~~ Cys-Leu-Leu-Arg-Arg-Ser-Arg- ~~L-L-C~~ Leu-Leu-Cys

Seq ID No 8 PepG_7 ~~C-G$_7$-C~~ Cys-Gly-Gly-Gly-Gly-Gly-Gly-Gly-Cys

Seq ID No 7 PepRGD ~~C~~ Cys-Glu-Leu-Arg-Gly-Asp-Gly-Trp- ~~C~~ Cys

Table 3. Sequences of Test Peptides

Pages 17-18, paragraph 48:

The specificity of SEQ ID NO 3 for endothelial vessels is illustrated in Figure 7. In this experiment, PC-3 tumor-bearing mice were injected (as described above) with positive control poly-L-lysine, negative control ~~peptide G7~~ SEQ ID NO 8 Pep G_7 and peptide SEQ ID NO 3. Fig. 7A, 7B and 7C are micrographs illustrating cross-sections of PC-3 tumor from tumor-bearing mice that were injected with peptides. In each figure, the gray diamond indicates the location of the lumen of the blood vessel. Fig. 7A is poly-L-lysine injection that is not only bound to the cells of the blood vessel, but also diffused through the intercellular space. Fig. 7B is the negative control injection, ~~G7~~ SEQ ID NO 8 Pep G_7, which showed no binding activity. Fig. 7C displays the distribution of SEQ ID NO 3 binding following injection. An intense binding to the cells of the vessel

observed. However, staining was limited to the blood vessel wall, *i.e.* endothelial cells.

Please enter the substitute Sequence Listing comprising SEQ ID NOs 1-8 attached hereto.